

TRICHLOROACETIC ACID**0586**

November 1998

CAS No: 76-03-9
 RTECS No: AJ7875000
 UN No: 1839
 EC No: 607-004-00-7

Trichloroethanoic acid
 Aceto-caustin
 TCA
 $C_2HCl_3O_2$ / CCl_3COOH
 Molecular mass: 163.4

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Sore throat. Cough. Burning sensation. Headache. Nausea. Vomiting. Shortness of breath. Laboured breathing. Symptoms may be delayed (see Notes).	Ventilation (not if powder), local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
Skin	Pain. Redness. Blisters. Skin burns.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	Pain. Redness. Severe deep burns.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Burning sensation. Abdominal pain. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest. Refer for medical attention. See Notes.

SPILLAGE DISPOSAL

Sweep spilled substance into water filled containers; if appropriate, moisten first to prevent dusting. Cautiously neutralize remainder with alkali such as sodium bicarbonate, sodium hydroxide. Then wash away with plenty of water. Personal protection: complete protective clothing including self-contained breathing apparatus.

PACKAGING & LABELLING

C Symbol
 N Symbol
 R: 35-50/53
 S: (1/2-)26-36/37/39-45-60-61
 UN Hazard Class: 8
 UN Pack Group: II

Unbreakable packaging; put breakable packaging into closed unbreakable container.

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-80GC4-II+III

SAFE STORAGE

Separated from food and feedstuffs. See Chemical Dangers. Cool. Dry. Well closed. Keep in a well-ventilated room.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS HYGROSCOPIC CRYSTALS, WITH PUNGENT ODOUR.

Chemical dangers

The substance decomposes on heating producing toxic and corrosive fumes including hydrogen chloride and chloroform. The solution in water is a strong acid, it reacts violently with bases and is corrosive to many metals.

Occupational exposure limits

TLV: 1 ppm as TWA; A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2005).
MAK: 1lb (not established but data is available); (DFG 2005).

Routes of exposure

The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

Inhalation risk

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20/C.

Effects of short-term exposure

The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion. Inhalation of vapour may cause lung oedema (see Notes). The effects may be delayed. Medical observation is indicated.

PHYSICAL PROPERTIES

Boiling point: 198/C
Melting point: 58/C
Density: 1.6 g/cm³
Solubility in water: very good

Vapour pressure, Pa at 51/C: 133
Relative vapour density (air = 1): 5.6
Octanol/water partition coefficient as log Pow: 1.7

ENVIRONMENTAL DATA

NOTES

The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation is therefore essential.
Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.
Card has been partly updated in October 2005. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information